

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

## SAN FRANCISCO BAY REGION

2101 WEBSTER STREET, SUITE 500  
OAKLAND, CA 94612TEL: (510) 286-1255  
FAX: (510) 286-1380  
BBS: (510) 286-0304

June 27, 1996

File No. 1114.17(SIM)

Mr. Richard Procunier, Project Manager  
U.S. Environmental Protection Agency, Region IX  
Hazardous Waste Division (H-6-4)  
75 Hawthorne Street  
San Francisco, CA 94105

Dear Mr. Procunier:

**Subject: Quarterly Progress Report for the South Bay MSCA  
Fiscal Year 96 for the Quarter 1 January - March 31, 1996**

Attached is the quarterly report. As before, we are open to any constructive critique of this report to assist you in its review.

The EPA MSCA is currently scheduled to run through June 30, 1996, and then transfer over to a state cost-reimbursement program with no EPA support. We are now in the process of completing the state actions to accomplish this. Also, as in last quarter's report, one "glitch" that was previously unaccounted for is that the State Water Board's administrative assistance in preparing the site file for EPA to use for back-up for cost recovery from the RPs will probably have to continue for several months to accommodate for the charges through June 30 and to "wind down" and "finalize" MSCA. Estimated costs should not exceed \$20,000 and a time extension to September 30 is appropriate to accommodate State Water Board's administrative processing and possibly some Program Management costs at the Regional Water Board.

While the total grant amount remains unchanged, due to unplanned additional and necessary work on several sites (e.g. Solvent Services), it will be necessary to readjust the fund amounts between the various sites to accommodate the ability of the state to draw down funds expended in excess of current site allocations. Also enclosed is an annotation of your "spread sheet" of MSCA site information. Please inform me as soon as possible on your plans to accommodate this "wind down" and closure.

Please call me (510/286-0304) if you have any questions.

Sincerely,

Steve Morse  
MSCA Program Manager

Attachment

cc: LKB, LPK, SAH, AGL, DAM, D. Phillips (SWRCB/DAS(Budgets))

DAVID G.  
Note:  
According to the  
State, there's No  
report for April -  
June 96.

# **QUARTERLY STATUS REPORT**

**January - March 1996**

## **SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT (MSCA)**

EPA GRANT NUMBER V-009403-02-D  
(as of June 30, 1995)

State Water Resources Control Board

California Regional Water Quality Control Board  
San Francisco Bay Region  
Toxics Cleanup Division

May 15, 1996

**QUARTERLY PROGRESS REPORT  
SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT  
January - March 1996**

The goals of the MSCA for this phase are:

- *To accelerate cleanup at Superfund sites in the South Bay.*
- *To augment the RWQCB's existing programs to ensure that the EPA's requirements, as defined in the National Contingency Plan (NCP), are met for those NPL sites assigned to the RWQCB as lead agency.*

\* \* \*

The South Bay Multi-Site Cooperative Agreement (MSCA), Phase II, was awarded and accepted by the State Water Resources Control Board effective April 13, 1988. This progress report for this phase is submitted to satisfy the Special Conditions. This report covers the January - March 1996 quarter as amended in subsequent grant offers, the latest being awarded June 30, 1995, to extend the agreement to June 30, 1996.

The MSCA Grant provides funding for activities of the state (i.e. State Board and Regional Board) responsible for coordinating and enforcing groundwater cleanup programs at Federal Superfund sites in the South Bay. The estimated expenditures, staff years, and accomplishments are compared to the work plans of January 28, 1988, March 9, 1989, February 13, 1990, January 1991, January 22, 1992 (w/ Regional Board workplan amendments of May 3, 1993), and December 1993 as further modified.

## CONTENTS

Program Element	Page
<b>Special Conditions</b> .....	II-1
<b>Summary and Status of MSCA Tasks and Budgets</b> .....	III-1
Significant Events and Activities During the Grant Quarter .....	III-1
Status and Funding of MSCA Tasks .....	III-2
Forecasted MSCA Tasks and Activities Next 3-6 Months .....	III-3
SOUTH BAY MSCA GRANT SCHEDULE REQUIREMENTS (RAP/ROD) .....	III-4
TABLE - Summary of South Bay MSCA Total and Site Expenditures as of 31 March 96 .....	III-6
<b>TASKS</b>	
<b>A. Program Management</b> .....	III-7
<b>B. Site Management System</b> .....	III-8
<b>D. Community Involvement</b> .....	III-9
<b>E. Tier I Activities</b> .....	III-10
<b>E2. RWQCB Oversight of NPL PRP Tasks</b> .....	III-11
Status of Regional Board lead sites .....	III-13
Status of Regional Board support sites .....	III-21
Status of Regional Board MSCA Contracts in Support of Task E2 .....	III-22

This page intentionally blank.

**QUARTERLY PROGRESS REPORT  
SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT  
January - March 1996**

**II - SPECIAL CONDITIONS**

*Besides the tasks in the MSCA's Workplan, some of the grant's Special Conditions require the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) to perform certain activities. The Revised Special Conditions responded to here are part of the grant offer of September 29, 1994, and as further amended.*

An amended Workplan for 1994-1995 for \$723k was submitted to and approved by the EPA with an award September 29, 1994. A no-cost time extension to June 30, 1996 was granted by US EPA at the state's request June 30, 1995.

Under the terms of the Special Conditions, the Board will be requesting that EPA redirect funds between several of the sites to cover unanticipated costs not yet budgeted. Additionally, the grant will be terminated June 30, 1996. Future work will utilize direct state cost reimbursement vs. EPA grant funds. This process is being finalized, but still needs some additional state work to assure wind-down and close out the grant. A short no-cost time extension to September 30 would be appropriate to meet all EPA requirements.

Due to a change in State accounting to allocate all non-site specific charges monthly (to the appropriate NPL sites in proportion to staff activity), the grant workplan non-site specific tasks (A, and B) and their accounting records can be misinterpreted. The budget and expenditures shown for this quarterly review are the *total for all sites*. EPA continues to finalize the few remaining MSCA sites for initial demands for cost-recovery started in early March 1992. EPA has to date received significant and substantial payments. Requests for additional cost-recovery payments are now underway by US EPA. The State will move all of the cost-recovery programs from the Superfund sites to the State system effective July 1, 1996. Final details are yet to be worked out; additional coordination with EPA will be necessary to finalize the change-over.

This page intentionally blank.

### III - SUMMARY AND STATUS OF MSCA TASKS AND BUDGETS

*This Section provides a summary as well as details where necessary on the quarterly progress and status of the MSCA tasks in the Workplan approved in the September 1994 award as amended June 1995.*

To accelerate the cleanup at the South Bay Federal Superfund sites the EPA assigned the responsibility along with the necessary augmented funding to the State and Regional Boards to accomplish oversight and regulation of the South Bay Superfund sites under Federal and State law and regulations as well as EPA Guidelines.

In all instances the acute toxics threat and risk at the MSCA sites is now either under interim control (awaiting long-term solutions) due to aggressive earlier Board regulation and requirements for initial and interim investigations, removals, and remediation or the Board and EPA have adopted and the Responsible Parties are (or have) constructed and/or implemented the long-term remediation project to control chronic threats. The Regional Board's efforts are now focused primarily on the remaining sites requiring completion of any necessary investigations and development of cleanup alternatives (i.e. the RI/FS process) and a proposed cleanup plan (the RAP) for public review and comment (See Table, page III-4). After public review and comment, the Board will adopt the RAP in a Site Cleanup Order (i.e. CAO) as modified by public comment, staff recommendations and Board guidance. If EPA approves of the Board's actions and selects the same remedy (RAP), they will administratively adopt a Record of Decision (ROD). Close coordination with EPA is maintained during the process; there is no reason to believe that EPA would not choose the same remedy as the Board.

#### Significant Events and Activities During the Grant Quarter:

**South Bay MSCA Superfund Site Cleanup Decisions (RI/FS/RAP):** All the South Bay Superfund sites have accomplished significant amounts of work to meet Superfund final cleanup decision requirements. The tasks remaining are necessary to meet Federal Superfund (all of which the State requires as well) requirements to determine the best alternative considering protection of public health and the environment as well as the maintenance (i.e. high quality groundwater) and protection of the resource (i.e. water conservation and reclamation).

#### **Official Actions by the Board during Quarter:**

*January: None*

*February: None*

*March: None*

#### Other MSCA Events/Activities during the Quarter:

**Quarterly Enforcement Meeting:** EPA and the Board project staff meet and/or discuss the more active site cleanup progress as needed during the quarter, especially on the few remaining sites awaiting adoption of final cleanup plans and EPA RODs. Several informal meetings and phone conferences were held between EPA and RWQCB management/staff to update EPA and RWQCB staff and determine program and site actions. No joint quarterly meeting was held between Cal/EPA DTSC, EPA, and the Board covering the enforcement status of the South Bay toxics cleanup sites -- either Superfund or non-Superfund. These joint meetings were previously formalized in the updated South Bay Enforcement Agreement. At this time the primary area where the three agencies interface is the Stanford Industrial Park area in Palo Alto and at United Heckathorn and Liquid Gold sites in Richmond where the Board is a support agency to EPA and DTSC respectively.

**South Bay Groundwater Task Force:** Due to low past public attendance and interest, future meetings have been canceled unless a specific topic or site arises that warrants reconstitution of the task force. Contact with the usual participants of the Task Force is maintained through individual site-specific contacts.

**Board staffing:** During the quarter, the Board's staffing in support of the MSCA was satisfactory. Support of an Information System Technician (IST) is provided on an "as needed" basis. The Site Management System (SMS) was last updated June 1995 (for distribution) based upon an annual review and will be updated again this summer. In concert with an effort to reduce the amount of resources necessary to produce the Site Management System, the report will be updated through the use of this annual update (the first was May 1994) and followups via the RWQCB's computer Bulletin Board System (funded initially by MSCA and now on-line since March 1993).

## MSCA Tasks Status (cont.)

**1994-1996 MSCA Workplan:** Regional Board staff forwarded the 1994-1996 Workplan to the State Water Board for submittal to EPA on December 21, 1993. The State Water Board made an official application for the 1994-1996 in Spring 1994 and an amended application to better reflect actual funding needed Summer 1994.

The amended application came as a result of a meeting with EPA program management in late January 1994, subsequent staff meetings during Spring 1994, and further clarifications and/or modifications of the workplan made in an attempt to match resources needed to EPA obligations. Additionally, EPA and RWQCB staff jointly wish to reduce the transaction costs by making the MSCA a state program with reimbursement directly to the state. These changes have yet to be fully implemented by both the State and EPA and a further time extension under the agreement needs to be granted by EPA to complete the transition and meet all EPA requirements.

**EPA Cost-Recovery:** In early March 1992, EPA began the process of cost-recovery for the MSCA sites. The demands are for combined costs of the Board (through June 30, 1991) and EPA (through July 31, 1991). By the end of March 1992, several RPs had already paid, and most of the remaining billed sites have paid either in full or partially. A cost-recovery suit has been filed by EPA against Intel, Kim Camp III, CTS Printex, and ADN. A new EPA cost-recovery cycle is now underway. SWRCB continues to prepare and deliver site accounting records as necessary for the next cycle.

### Status and Funding of MSCA Tasks:

The *overall total obligated* funding status of the Grant tasks is satisfactory, especially with the new grant supplemental award received September 1994. However, even after the 1996 award (no-cost time extension), some redirection of grant funds will still be needed between sites due to work necessary (and not necessary) that was not anticipated in the workplan. The overall expenditures do not exceed the total MSCA obligations. The status of the individual tasks (and site budgets) varies (see the individual tasks following for detailed descriptions):

**A. Program Management:** Normal activities continue with an emphasis on assuring the final adoption of RAPs at several sites -- Rhône-Poulenc (wetlands) and National Semi's OU#2 -- and to

assure that time schedules would be met. RD/RA and O&M continues at other sites. Further budget refinements may be necessary to match the grant application to actual award since there has been such a time lag.

**B. Site Management System:** The SMS was officially updated June 1995 for the annual report for distribution with an "as of" date of May/June 1995. It now appears that paper copies may still be necessary, at least of a limited nature, on an annual basis at least. After a limited initial distribution, copies are made available for viewing at the RWQCB office, purchase at a local print shop at their (print shop) cost, and as well as by downloading from the BBS. Interim updates will be maintained on the BBS awaiting the annual update. Next annual update is expected late summer 1996.

**D. Community Involvement:** Up-to-date and continuing; see specific item. Community Involvement tasks are now accomplished by the respective project manager with some tasks being performed by a designated staff person to coordinate overall activities where necessary. Prior training, extensive planning, and use of PRP staff and resources have made this practical. The impact of this change affects primarily those sites awaiting final RAP/RODs (e.g. National OU#2 and Rhône-Poulenc Wetlands) and will be monitored closely by the Program Manager. Because of the staffing change, the Community Involvement task work is being incorporated into the other tasks, primarily Task A., Program Management, and E.2, NPL Oversight, and will not be reported separately in this or future quarterly reports unless a significant task or activity is being reported. Overall activities on the sites are reported in Task E.2. and will include Community Involvement activities.

We continue to provide copies to the public of the RWQCB/EPA brochure on "Status of Superfund Groundwater Cleanup in the South Bay" that was published and distributed in November 1993.

**E2. NPL Site Oversight:** Currently, we are able to keep up with the staff work load although some schedules have slipped and are still slipping [e.g. Rhône-Poulenc/Sandoz (Wetlands OU), National Semiconductor OU#2] due to the complexity of the sites (wetlands and multiple parties respectively). The typical scenario finds that as the cleanup tasks in the RI/FS workplan become solidified and finalized that details formerly unknown or

## MSCA Tasks Status (cont.)

unresolved take on an importance not previously appreciated (e.g. HP sites). Some unforeseen slippages in the current MSCA schedules have occurred and probably will occur again (e.g. agency agreement and oversight for the wetlands cleanup and remediation at Rhône-Poulenc, etc.). State staff will do everything in their power to minimize slippage. Additionally, the utilization of Operable Units is being used where a firm decision can be made on a given unit *and* a final decision on the remainder of the site can not be made for a considerably longer time (e.g. one year or longer). A review of the site schedule (page III-4) indicates actual and probable slippage from the schedules updated for this quarter and as changed since the last quarter's report.

An additional factor that could delay the remaining final RODs, but probably not the state RAPs is activity by the State Department of Health Services in the preparation of Health Assessments (HA) under contract for the Agency for Toxics Substances and Disease Registry (ATSDR) as required by CERCLA/ SARA. To date, it is still not clear what the significant differences are between ATSDR/DHS' Health Assessments and the Board's BPHE and Risk Assessments or how they will be involved in RAP/ROD decision-making since the HA will not normally be available until after the Board adopts a RAP. To date, no ROD has been knowingly held up because of ATSDR's HA.

Mitigating these potential delays is the fact that the Board has required interim remediation, the definition work has been mostly completed (NSC OU#2), and the Board can implement enforcement quickly where needed and necessary. Staff is aware of slippages and is working to assure completion to the amended schedule as well as preventing further slippage. At this time no enforcement is planned.

Internal over expenditures by site are primarily caused by several administrative problems:

- Within the tasks, CALSTARS reports utilized currently do not provide an appropriate breakout between indirect costs and (few, if any) contract costs.
- Within the task by site, over expenditures are caused by the implementation of specific site budgets where none existed before and unanticipated work or difficulty of work that could not be foreseen by the original budget.

With the new award of September 1994, redirection corrected this problem (by task) as it stood then, but additional, unanticipated site work has caused some over expenditures on some of the sites. For tracking purposes, the overall *total* grant budget must be utilized.

- The grant award was late due to delays in the submission and award; earlier over expenditures were covered by previous award budgets and were partially reconciled with the previous grant award budget redirections. No additional overall funding is requested at this time, but additional redirections were made with the September 1994 award and will be needed again. It is expected that redirections, a "clean-up" and reconciliation adjustment of the grant, and a short time extension will be necessary in CY 1996 to reconcile funds and "wind down" the grant.
- To facilitate cost-recovery, all non-site specific work (Tasks A, B, etc.) is allocated monthly to the MSCA sites in proportion to the site activity for the month. Again, the real test of budget and spending at this time is to compare the *total* "bottom line".

Under expenditures are usually caused by changes in work, over estimation of work (usually anticipated problems do not appear), delays in site cleanup (staff work not able to be performed due to project delays and awaiting reports), and changing requirements (reducing significant assistance at the MEW sites).

The table on page III-6 is a summary of the grant budget status of all the sites and shows the approved budget and total accumulated expenditures for staffing, expenses and contracts during the quarter and the life of the Cooperative Agreement (Phase II) since initial award April 13, 1988, including the July 90, May 91, June 92, July 93, September 94, and June 95 (no-cost time extension) awards. The Regional Board Program Manager will most likely request a redirection between sites to reconcile sites budgets in 1996. No overall increase in total budget is foreseen due to these charges at this time.

### Forecasted MSCA Tasks and Activities Next 3 - 6 Months:

--Activity continues, as shown in the MSCA Schedule (see page III-4), to develop NSC's OU#2

## **MSCA Tasks Status (cont.)**

RI/FS, and finalizing Rhône-Poulenc's Wetlands  
RI/FS and RAP.

--Maintain revised time schedules in Community  
Relations Plans in coordination with overall  
schedule, especially NSC and Rhône-Poulenc sites.

**SOUTH BAY MSCA SCHEDULE**

(updated 6/5/96 by RWQCB; # indicates change since last report)

Site	RI/FS and RAP Completed and Available for Public Comment		Final RAP/ROD Adopted	
	mo/yr	FFY/Q	mo/yr	FFY/Q
1. Advanced Micro Devices - Arques	RI/FS adopted; ROD signed; RA and O&M underway			
2. Advanced Micro Devices - Bldg 901/902	RI/FS adopted; ROD signed; RA and O&M underway			
3. Advanced Micro Devices 915	RI/FS adopted; ROD signed; RA and O&M underway			
4. Applied Materials	RI/FS, RAP adopted; ROD signed/amended; RA and O&M underway			
5. CTS Printex	RI/FS and RAP adopted; ROD signed; RA and O&M underway			
6. Fairchild, San Jose	RI/FS and RAP adopted; ROD signed; RA and O&M underway			
7. Hewlett Packard, 1501 Page Mill	RI/FS compl.; RAP adopted by RWQCB 8/17/94; RA and O&M underway			
8. Hewlett Packard, 640 Page Mill	RI/FS compl.; RAP and ROD adopted; RA and O&M underway			
9. Hexcel	RAP/ROD Sep 93, but now no longer part of the MSCA (NPL delisting)			
10. Intel Magnetics / Micro Storage	RI/FS adopted; ROD signed; RA and O&M underway			
11. Intel Santa Clara III	RI/FS & RAP adopted; ROD signed; RA and O&M underway			
12. International Business Machines	RI/FS and RAP adopted; ROD signed; RA and O&M underway			
13. Intersil / Siemens	RI/FS and RAP adopted; ROD signed; RA and O&M underway			
14. National Semiconductor	RI/FS adopted; ROD signed; RA and O&M underway			
Operable Unit 1	RI/FS adopted; ROD signed; RA and O&M underway			
Operable Unit 2	TBD(early 97)	TBD(early 97)	TBD(early 97)	TBD(early 97)
15. Rhône Poulenc/Sandoz Crop Prot Corp	RI/FS adopted; ROD signed; RA completed 11/92 (Annex ESD 3/94)			
Uplands Operable Unit	RI/FS adopted; ROD signed; RA completed 11/92 (Annex ESD 3/94)			
Wetlands Operable Unit	TBD(12/96)#	TBD (97/1#)	TBD (12/96)#	TBD (97/1)
16. Signetics	RI/FS adopted; ROD signed; RA and O&M underway			
17. Solvent Services	RI/FS & RAP adopted; ROD signed; RA and O&M underway			
18. Spectra Physics	RI/FS adopted; ROD signed; RA and O&M underway			
19. Synertek 1	RI/FS & RAP adopted; ROD signed; RA and O&M underway			
20. Teledyne	RI/FS adopted; ROD signed; RA and O&M underway			
21. TRW/FEI Microwave	RI/FS adopted; ROD signed; RA and O&M underway			
22. Van Waters & Rogers	RI/FS and RAP adopted; ROD signed; RA and O&M underway			

TBD=To Be Determined

Notes: Federal lead sites, for which RWQCB receives funding under MSCA for its support activities, have identical milestones, but are not included here since the RWQCB is not directly responsible for meeting those time schedules. The State-required RAPs are final when the NBAR is completed; does not affect the Federal Superfund process, only state required Non-Binding Allocation of Responsibility (i.e. NBAR).

# MSCA Tasks Status (cont.)

C:\PFAIR2\MSCA.XLS

## MSCA EXPENDITURE/DRAWDOWN DATA MULTI-SITE THROUGH 03/31/96

MSCA PHASE II PROJECT #	ACCOUNT NUMBER	AMOUNT AUTHORIZED	BAL OF AWARD 09-V-005	AWARD 09-V-009 07/09/93	AWARD 09-V-010 09/29/94	TOTAL AUTHORIZED	ALL FISCAL YEAR DATA				
							CUM EXP	CUM DRAWS	DIFF	NEXT DRAW	UNABLE TO DRAW
MSCA02-00		0.00				0.00	0.00	0.00	0.00	0.00	0.00
MSCA02-01		0.00				0.00	0.00	0.00	0.00	0.00	0.00
MSCA02-02	KN82/KP82	157,528.00	12,945.00	28,000.00	7,846.00	206,319.00	159,120.23	158,862.88	257.35	257.35	0.00
MSCA02-03	K3H1/KNH1/KPH1	130,184.00	12,945.00	34,004.00		177,133.00	111,972.00	111,715.61	256.39	256.39	0.00
MSCA02-04	KP83	245,248.00		58,743.00	82,790.00	386,781.00	382,970.02	381,447.11	1,522.91	1,522.91	0.00
MSCA02-05	K384	37,378.00	11,030.00			48,408.00	7,721.47	7,721.47	0.00	0.00	0.00
MSCA02-06	KP62	46,543.00		22,760.00	71,069.00	140,372.00	97,031.20	96,614.81	416.39	416.39	0.00
MSCA02-07	KP85	271,777.00		165,321.00	6,381.00	443,479.00	383,177.40	381,691.71	1,485.69	1,485.69	0.00
MSCA02-08	KPH9	407,106.00		152,700.00	17,116.00	576,922.00	528,275.90	525,711.55	2,564.35	2,564.35	0.00
MSCA02-09	KP40	71,058.00	11,030.00	27,559.00	28,416.00	138,063.00	90,460.61	89,264.92	1,195.69	1,195.69	0.00
MSCA02-10	K386	38,408.00				38,408.00	6,015.06	6,015.06	0.00	0.00	0.00
MSCA02-11	KP88	118,452.00	11,030.00	18,150.00	51,820.00	199,452.00	194,305.98	193,716.45	589.53	589.53	0.00
MSCA02-12	KP87	170,899.00	11,030.00	18,150.00	49,802.00	249,881.00	202,245.17	202,190.17	55.00	55.00	0.00
MSCA02-13/20	KPJ2	118,345.50	5,515.00	15,082.00	16,457.00	155,399.50	137,409.95	136,109.30	1,300.65	1,300.65	0.00
MSCA02-14	KP89	47,178.00		28,371.00	31,398.00	106,947.00	62,115.74	62,115.74	0.00	0.00	0.00
MSCA02-15	K3C7	4,620.00				4,620.00	0.00	0.00	0.00	0.00	0.00
MSCA02-16	KP90	217,117.00		49,803.00	37,983.00	304,903.00	275,429.86	274,927.38	502.48	502.48	0.00
MSCA02-17	KP91	300,623.00		33,085.00	121,250.00	454,958.00	440,741.51	437,297.02	3,444.49	3,444.49	0.00
MSCA02-18	KPH5	151,844.00	10,063.00	17,889.00	33,777.00	213,573.00	185,260.38	182,626.36	2,634.02	2,634.02	0.00
MSCA02-19	K393	28,408.00				28,408.00	2,891.69	5,891.69	(3,000.00)	(3,000.00)	0.00
MSCA02-20	KPJ2	155,399.50				155,399.50	119,851.58	118,956.33	895.25	895.25	0.00
MSCA02-21	KP94	125,380.00	12,945.00	31,904.00	18,140.00	188,369.00	144,007.85	143,752.74	255.11	255.11	0.00
MSCA02-22	KPK1	162,354.00	14,530.00	31,958.00	3,997.00	212,839.00	184,646.16	183,278.82	1,367.34	1,367.34	0.00
MSCA02-23	KNK3/KPK3	127,045.00	11,030.00	18,150.00	21,067.00	177,292.00	127,752.57	127,604.82	147.75	147.75	0.00
MSCA02-24	K3K4/KNK4/KPK4	165,091.00	12,945.00	28,103.00		206,139.00	147,852.26	147,202.38	649.88	649.88	0.00
MSCA02-25	KP95	157,952.00	14,530.00	31,958.00	11,949.00	216,389.00	186,347.32	184,925.12	1,422.20	1,422.20	0.00
MSCA02-26		0.00				0.00	0.00	0.00	0.00	0.00	0.00
MSCA02-27	KN96/KP96	206,905.00	10,063.00	21,984.00	2,354.00	241,306.00	214,514.79	213,074.64	1,440.15	1,440.15	0.00
MSCA02-28	KP97	38,408.00	8,770.00	16,371.00	18,760.00	82,309.00	56,334.53	56,334.06	0.47	0.47	0.00
MSCA02-29	KP98	431,680.00		169,790.00		601,470.00	584,534.31	579,465.11	5,069.20	5,069.20	0.00
MSCA02-31	K3F6KNF6/KPF6	38,591.00	5,305.00	9,168.00	4,149.00	57,213.00	11,195.85	11,195.85	0.00	0.00	0.00
MSCA02-32	KPJ9	164,154.00	11,030.00	18,150.00	2,464.00	195,798.00	198,773.01	195,798.00	2,975.01	0.00	2,975.01
MSCA02-33	KNJ1/KPJ1	277,412.00		116,753.00		394,165.00	273,725.70	273,725.70	0.00	0.00	0.00
MSCA02-34	KPR3	27,997.00		15,405.00	35,629.00	79,031.00	41,150.74	41,150.73	0.01	0.01	0.00
MSCA02-35	KP47	8,078.00		33,745.00	32,043.00	73,866.00	37,335.74	37,336.16	(0.42)	(0.42)	0.00
MSCA02-36	KNM6/KPM6		206,989.00	49,369.00		256,358.00	10,873.20	10,663.24	209.96	209.96	0.00
		4,649,163.00	393,725.00	1,262,425.00	706,657.00	7,011,970.00	5,606,039.78	5,578,382.93	27,656.85	24,681.84	2,975.01
SITE 64						1,213,951.00					
						8,225,921.00					
IPA						67,358.00					
TOTAL						8,293,279.00					

## **PROGRAM ELEMENT A: PROGRAM MANAGEMENT**

The RWQCB is responsible for continued coordination and implementation of the South Bay MSCA Program. These activities include, but are not limited to, the following:

- *Maintaining the direction, scope, and quality of the South Bay Program*
- *Planning and oversight of the overall program schedule and budget*
- *Interagency coordination*
- *Staffing requirements and recruitment*
- *Supervision of Community Involvement*
- *Program analysis and development*
- *Supervision of procurement*

### **Product**

The products for Task A are the successful completion of all the tasks identified and funded under this phase of the South Bay MSCA.

Additionally, most site-file cost-recovery work will be initially charged against this task with allocation among the sites made later depending upon the actual work necessary to establish and maintain individual site-specific cost files.

Within the overall program management, the most significant program management activities during this period involved the coordination / management necessary to meet MSCA time schedules; and day-to-day supervision and management of ongoing MSCA tasks at ROD adopted sites (i.e. ongoing RD/RA and O&M); and closure of US EPA MSCA with attendant transition tasks to state cost-reimbursement.

### **State Budgeted Activities**

Task A involves supervising and implementing specific tasks (i.e. contracts) included in the MSCA. There is no existing state-funded budget provided for this activity. All Task A funding is MSCA funded by allocating costs to individual sites.

### **Costs**

The expenditures for the quarter are combined with the other tasks and included in the Program Budget Table on page III-6.

## **PROGRAM ELEMENT B: SITE MANAGEMENT SYSTEM**

### **Task Description**

Under the earlier and current MSCA agreements the RWQCB implemented a computerized system to track RI (site remedial investigation), FS (feasibility studies / alternatives evaluation), and the implementation of remedial action activities for use of the RWQCB, Cal/EPA-DTSC and EPA management personnel for use in site enforcement and task tracking.

Additionally, as part of the community involvement program the SMS has been distributed to 15 municipal agencies, 9 libraries, 7 state and federal agency representatives, 2 environmental groups, and 1 manufacturers group, as well as sold (for reproduction costs) to those desiring it (primarily consultants).

### **Products**

The Board has changed the SMS with the approval of the revised workplan of 1992-93. The 1992-93 workplan supported a significantly reduced SMS effort, at least for the "paper" portion. Regional Board implemented this "new" SMS in early 1993 utilizing a computer Bulletin Board format with a computer purchased in December 1992 utilizing MSCA funds. The BBS portion went on-line March 18, 1993. The yearly updated paper edition was updated June 1995 and distributed to EPA, Cal/EPA-DTSC, and various governmental and public agencies and interest groups.

Continuing updates until the next annual paper update will be maintained for public and staff access on the BBS. The next paper update will be late summer 1996.

### **State Budgeted Activities**

There is no existing State-funded budget or activities for the Site Management System.

### **Cost**

Expenditures for the quarter for Task B are included in the Program Costs Table on page III-6.

## PROGRAM ELEMENT D: COMMUNITY INVOLVEMENT

### Task Description and Objectives

The main objectives of community involvement activities performed under the MSCA are:

- *Provide the general public with information on ground water systems, water supply sources, water quality, hazardous waste regulatory processes, and scope, progress and findings of remedial response activities.*
- *Provide sufficient background information about technical and environmental issues to help the public understand and assess remedial actions.*
- *Provide information, especially technical findings, in a form understandable to the general public.*
- *Provide elected officials and the media with timely detailed information at key points throughout program activities.*
- *Use the media as a major means of disseminating information to the general public.*
- *Establish a two-way information exchange with environmental, public interest, and other concerned groups throughout the remedial response program.*
- *Provide the means for all interested individuals to express concerns and make inquiries throughout project activities. (the opportunity for two-way communication is particularly important because of the length and complexity of the project).*
- *Use the Groundwater Task Force, for overall coordination and review of community involvement efforts.*
- *Create an interagency community involvement team to further coordinate the flow of information from agencies to the public.*
- *Monitor public concerns and information needs*

- *Modify the community involvement plan(s) to respond to changes in community attitudes and needs.*

Community involvement activities conducted under the MSCA function independently, but coordinated with, EPA's area wide (but limited) community involvement strategy as well as DTSC's site community involvement programs. Specifically, the RWQCB will be responsible for providing information and directing community involvement activities for RWQCB-lead sites.

Community Involvement activities are now significantly reduced as the IGA staff on-loan from EPA returned to EPA in October 1993 and all Community Involvement work will now be handled by Board staff. Losing the full-time staff is mitigated by the reduced workload with only several sites awaiting completion of RAP/RODs as well as significant planning to assure a satisfactory transition.

### Products

Per earlier explanation, all Community Involvement activities are now combined into the project managers' tasks of site oversight.

### Future Activities

Future activities are currently scheduled to meet the MSCA Special Conditions, especially for the sites awaiting final RAP/RODs (i.e., NSC OU#2, Rhône-Poulenc.)

### Costs

All costs for Community Involvement are now included in the other tasks as part of the every day work. All Community Involvement work will now be performed by state employees. See the Table on page III-6 for overall grant budget status that includes Community Involvement costs by site.

## **PROGRAM ELEMENT E: TIER I ACTIVITIES**

Tier I activities are those activities that occur at specific sites in the South Bay.

**TASK E1.\* IDENTIFICATION OF NEW SITES**

**TASK E2. RWQCB OVERSIGHT OF NPL PRP ACTIVITIES**

**TASK E1a.\* SCREENING OF NEW SITES IN ORDER TO CONDUCT Pas ON MOST SENSITIVE SITES**

**TASK E1b.\* OVERSIGHT OF PRP SI**

## TASK E2. RWQCB OVERSIGHT OF NPL PRP ACTIVITIES

Regional Board activities in this task cover the RI/FS oversight RD/RA and/or regulation underway at the 30 South Bay MSCA Superfund sites (31 companies/agencies either final and proposed including Liquid Gold and United Heckathorn in Richmond) for which the Board as a regulatory agency has either the current lead (21) or the supporting agency role (9). The current Agency-Lead and NPL Status as of this report are covered below.

### EPA Lead Superfund Sites:

- \*1. Fairchild Semiconductor Corp.,  
464 Ellis St., Mountain View
- \*2. Intel Corp., 365 E. Middlefield Rd.,  
Mountain View
- 3. Jasco Chemical Company, 1710 Villa St.,  
Mountain View
- 4. Lorentz Barrel and Drum, 1515 S. 10th St.,  
San Jose
- \* Moffett Naval Air Station, Sunnyvale  
(no longer part of South Bay MSCA)
- \*5. Raytheon Company, 350 Ellis St., Mountain  
View
- 6. United Heckathorn, Richmond
- 7. Westinghouse Electric Corporation, 401 E.  
Hendy Ave., Sunnyvale

### RWQCB Lead Superfund Sites:

- \*1. Advanced Micro Devices, 901 Thompson Pl,  
Bldg. 901, Sunnyvale
- 2. Advanced Micro Devices, Bldg. 915., 915  
Deguigne Dr., Sunnyvale
- \*3. AMD-Arques, (formerly Monolithic  
Memories, Inc.), 1165 East Arques Ave.,  
Sunnyvale
- 4. Applied Materials, 3050 Bowers Avenue,  
Santa Clara
- 5. CTS Printex, 1905-1931 Plymouth St.,  
Mountain View
- 6. Fairchild Camera and Instrument Corp.,  
Bernal Road, San Jose
- 7. Hewlett-Packard, 640 Page Mill Rd., Palo  
Alto
- 8. Hewlett-Packard, 1501 Page Mill Rd., Palo  
Alto
- Hexcel, Livermore  
(no longer part of South Bay MSCA)
- 9. Intel Facility III, 2880 Northwestern  
Parkway, Santa Clara
- 10. Intel Magnetics/MicroStorage, 3000  
Oakmead Village Dr., Santa Clara
- 11. International Business Machines, Cottle  
Road, San Jose

- \*12. Intersil, Inc., and Siemens Components,  
Inc., Cupertino
- \*13. National Semiconductor, 2900  
Semiconductor Dr., Santa Clara
- 14. Rhône-Poulenc/Sandoz, 1990 Bay Road,  
East Palo Alto
- \*15. Signetics, 811 E. Arques, Sunnyvale
- 16. Solvent Services, 1022 Berreyessa Road, San  
Jose
- \*17. Spectra-Physics, Inc., 1250 West Middlefield  
Road, Mountain View
- 18. Synertek #1, Santa Clara
- \*19. Teledyne Semiconductor, 1300 Terra Bella  
Ave., Mountain View
- \*20. TRW Inc., 825 Stewart Pl., Sunnyvale
- 21. Van Waters & Rogers, Inc., 2256 Junction  
Ave., San Jose

\* above sites will be treated as part of a combined site, at least for off-site work.

### Cal/EPA-DTSC Lead Superfund Sites:

- 1. Liquid Gold, Richmond

### EPA NPL Modifications (RCRA "drop" sites):

EPA's proposed rule-making in June 1988, (NPL Update #7) recommended that 6 NPL sites be deleted from the NPL since they are RCRA sites. Two other RCRA sites were proposed to be retained on the NPL. RWQCB officially commented to EPA-HQ on this proposal to delete high-priority RCRA sites by questioning the timeliness of the RCRA regulation update, future MSCA funding for these CERCLA/RCRA sites, and the lack of Technical Assistance Grants to citizen groups for RCRA (only) sites. EPA-IX has stated that the RCRA sites (proposed deleted and those remaining) will be treated as NPL sites to assure attention to cleanup appropriate to their NCP HRS scoring.

On October 4, 1989, EPA announced its final rule on the dropping of some of the NPL sites that are also RCRA sites. Under this rule, the following sites have been dropped from the NPL:

Hewlett-Packard, 1501 Page Mill Road  
IBM, San Jose  
Rhône Poulenc/Sandoz, East Palo Alto  
Signetics, Sunnyvale  
Van Waters and Rogers, San Jose

EPA and the Board, per policy, continue to treat the RCRA "drop" sites the same as NPL sites in terms of requirements, tasks, and cleanup. Due to

## Task E2 - Site Oversight (cont.)

staffing constraints, the RWQCB's final Site Cleanup Order adopting the RI/FS and RAP will be the last regulatory action. Review and comment on the RWQCB's SCR by EPA-IX will suffice for approval unless the EPA is in disagreement with the RWQCB's actions.

### Products during Reporting Period:

Official Regional Board actions / Orders affecting the South Bay MSCA:

*January: None*

*February: None*

*March: None*

**South Bay MSCA Superfund Site Cleanup Decisions (Remedial Investigations/Feasibility Studies/Remedial Action Plan):** All the South Bay Superfund sites have performed significant amounts of work to meet Superfund final cleanup decision requirements. The tasks remaining are necessary to meet State and Federal Superfund (almost all of which the State requires as well) requirements to determine the best alternative cleanup plan considering protection of public health and the environment as well as the maintenance (i.e. high quality groundwater) and protection of the resource (i.e. water conservation and reclamation).

Board staff conducted the following tasks, as detailed in the EPA OSWER Memorandum dated October 1, 1986, entitled, "CERCLA Funding of Oversight of Potentially Responsible Parties by States at National Priority List Sites. "

### Review Tasks (all sites):

- Reviewed and commented on scope of work and work plans (all work plans requested and approved as of August 1990; updating due to operable units still may be necessary)
- Reviewed and commented on updates to Safety Plans
- Reviewed and Commented on drafts of portions of RI reports (all)
- Reviewed/discussed FS objectives
- Completed PRP reports (all)
- Organized and participated in technical meetings on the RI/FS with PRPs, PRP contractors, and/or EPA. (all)
- Provided Technical Support to the Community Relations Task for:

- Briefing of local and state officials
- Prepared fact sheets and press releases

### Field Related Tasks:

- On-site presence/inspection as necessary (all)

In addition, at RWQCB lead sites the following tasks were in progress by RWQCB staff or contracted by the RWQCB:

- Data Validation (all by IAG with DHS)
- Public Health Baseline Evaluation  
(all work other than by PRP is by EPA or by contract award to ICF/Clement for both BPHE, BPHE review, and RI/FS review)
- Maintenance of the Administrative Record  
(primary use of PRPs for initial preparation)
- Continue Implementation of Cost Recovery  
(all)

For those sites where the RWQCB is the Support Agency, staff provided support in the tasks described above to the extent necessary but not to exceed the staffing levels previously approved. Sites primarily affected: MEW, Lorentz, United Heckathorn, Westinghouse, JASCO, Liquid Gold.

For those sites under Regional Board lead, all but the Rhone-Poulenc Wetlands OU and National Semi OU#2 sites have had RAPs adopted by the Regional Board and RODs (or equivalent for some of the RCRA sites) approved by the US EPA. In fact some of the sites have already had their 5 year ROD review completed. (See Table, Page III-4).

**Costs and Budgets:** Even with the addition of the latest grant awards and the budget redirection among sites, some **site specific** over-and under-expenditures are occurring. While no new grant funds were required, redirection among sites in the latest award have been made, but it now appears that further redirection will be necessary to close the grant and allow the state full payment for work performed.

*The following is a description of the MSCA funded staff work and the current status at each of the MSCA Superfund sites.*

**REGIONAL BOARD LEAD SUPERFUND SITES:**

**ADVANCED MICRO DEVICES 901-902, SIGNETICS, TRW (FEI) MICROWAVE (THE COMPANIES)**

The Final Remedial Action Plan (RAP) for the combined site(s) was adopted by the Board in June 1991. EPA adopted the ROD in September 1991.

*Advanced Micro Devices (AMD)* is continuing to implement the site cleanup plan. Site remediation at the AMD site consists of extraction and treatment of groundwater, and excavation of approximately 37 cubic yards of residual soil contamination.

During the last quarter, groundwater extraction continued at 7 on-site extraction wells. The total volume of groundwater extracted during the quarter was 4.7 million gallons, averaging 35 gpm. A total of 10.2 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing an air stripper, and discharged under NPDES permit. No NPDES violations were reported this quarter.

During the previous quarter AMD and the Regional Board staff met to discuss the 5 year review report. During the next two quarters, AMD will continue groundwater extraction and treatment and will submit their five year review for the site.

*TRW Microwave* is continuing to implement the site cleanup plan. Site remediation at the TRW site consists of extraction and treatment of groundwater and soil vapor extraction. Because residual soil contamination at the site is minimal and at depths below the groundwater table, no further soil remediation has been required.

During the last quarter, groundwater extraction continued at 7 groundwater extraction wells and an eductor pit. Groundwater was extracted at approximately 18 gallons per minute, and the total volume extracted during the quarter was 2.3 million gallons. A total of approximately 28 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing an air stripper, and discharged under NPDES permit.

Although no further soil remediation has been required, TRW operates a soil vapor extraction system adjacent the eductor pit to enhance groundwater remediation. During the last quarter, the soil vapor extraction system removed 226 pounds of VOCs. Groundwater monitoring generally

shows a continued decline in groundwater contamination levels.

During the previous quarter TRW and the Regional Board staff met to discuss the 5 year status report and potential modifications to the existing groundwater cleanup. During the next two quarters, TRW will continue groundwater and soil vapor extraction and treatment, and will submit their five year review for the site.

*Philips Semiconductors* (formerly Signetics) is continuing to implement the site cleanup plan. Site remediation at the Philips Semiconductors site consists of extraction and treatment of groundwater and soil vapor extraction.

During the last quarter, groundwater extraction continued at extraction wells, extraction trenches, and basement dewatering systems. The total volume of groundwater extracted was 13 million gallons, and a total of approximately 482 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing an air stripper, and discharged under NPDES permit. Up to 12,000 gpd of the effluent is reclaimed for landscaping or restroom plumbing. The soil vapor extraction system, which has removed a total of 731 pounds of VOCs, is in the "shut down" phase of the pulse pumping program.

Philips has initiated additional on-site sampling to further confirm the effectiveness of their groundwater remediation. During the next two quarters, Philips will complete the confirmation sampling, continue groundwater extraction and treatment, and submit a five year status report.

*TRW, Philips, and AMD* are continuing to implement the site cleanup plan for the Off-Site Operable Unit, the area north of the TRW/AMD/Philips sites which appears to be impacted by all three sites. Remediation at the Off-Site Operable Unit consists of two groundwater extraction systems, one located along Alvarado Avenue, the other along Duane Avenue.

During the last quarter, groundwater extraction continued at the Alvarado and Duane Avenue extraction systems. Groundwater was extracted at rates of approximately 177 gallons per minute. The total volume extracted during the quarter was 23 million gallons. A total of 121 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing air strippers, and discharged under NPDES permit. Regular maintenance of the extraction and treatment system was also performed this quarter.

## Task E2 - Site Oversight (cont.)

During the next two quarters, the companies will continue groundwater extraction and treatment, and submit a five year status report for the Off-Site Operable Unit.

### **ADVANCED MICRO DEVICES, BUILDING 915, 915 DEGUIGNE DRIVE, SUNNYVALE**

*Advanced Micro Devices (AMD)* continues to implement the site cleanup plan specified in the ROD adopted in August 1991. Groundwater is being remediated via groundwater extraction and treatment. All contaminated soil has been removed from the site.

During the last quarter, groundwater extraction continued at 9 on-site extraction wells. The total volume of groundwater extracted during the quarter was 8.1 million gallons, averaging 61 gpm. A total of 32 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing an air stripper, and discharged under NPDES permit. The groundwater contamination plume appears to be contained beneath the site, and appears to be impacted from upgradient sources.

During the previous quarter AMD and the Regional Board staff met to discuss the 5 year review report. During the next two quarters, AMD will continue groundwater extraction and treatment and will submit their five year review for the site.

### **APPLIED MATERIALS, INC. BUILDING 1, 3050 BOWERS AVENUE, SANTA CLARA**

The final Remedial Action Plan (RAP) for the Building 1 site was adopted by the Board in September, 1990. A ROD for a groundwater Operable Unit was adopted September 28, 1990; a Final ROD was adopted August 25, 1993. A Superfund Preliminary Close Out Report was issued September 27, 1993. The Cleanup Plan for this site includes only groundwater extraction and treatment by air stripping.

*Activities this quarter:* The quarterly NPDES report was submitted for the reporting period. No VOCs were detected above permit limits in the effluent. The Annual Monitoring Report (Feb. 1995 - Jan. 1996) was also submitted. The projected clean-up times for site groundwater have been updated in this report: it is now estimated that it will take at least 12 years from the present to reach MCLs in "A-zone" groundwater throughout the site, and at least 35 years to reach MCLs in groundwater in the "A2 zone".

About 4.07 kgs (9 lbs) of VOCs were removed from site groundwater during the period Feb. '95 through Jan. '96. A "phased" plan to modify pumping schedules of certain extraction wells was presented to and accepted by Board

Staff in February of 1996, and the initial modification has been implemented.

*Projected Events for next two quarters:* AM is expected to submit periodic reports as required. Building 1 is the oldest building on the Applied Materials campus. The building is expected to undergo major renovation to bring it up to current building codes and upgrade the structure seismically. This activity was scheduled to begin in February of 1996 with a scheduled completion date of November, 1996. There will be partial occupancy of the building throughout the construction activities. The planned activity probably will have some minimal impact on the Building 1 groundwater extraction and treatment systems: rerouting of some piping may be required, and temporary shutdowns of the extraction and treatment systems, of short durations, may be required.

The Phase I of extraction well modifications began in April, 1996; a preliminary report is to be submitted towards the end of May, 1996, and a final Phase I Report in early June, 1996. A Phase II is scheduled to begin later this year.

### **CTS PRINTEX, 1905, 1911, 1921, AND 1931 PLYMOUTH STREET, MOUNTAIN VIEW**

The Final RAP was approved on May 15, 1991, under Site Cleanup Order No. 91-081. The cleanup plan consists of extraction and treatment of groundwater until cleanup standards are met, and long term monitoring.

The remediation system began extracting groundwater in 1987. Since then approximately 106 million gallons of groundwater were extracted and 102 pounds (8.5 gallons) of TCE have been removed from the water bearing zone. Significant reductions in TCE concentrations were achieved during the first years of operation. However, monitoring well data show that TCE concentrations are approaching asymptotic levels.

Pumping rates were altered on March 15, 1995 to optimize extraction from selected wells. A review of the groundwater contours indicate that the reduced pumping rates still provide the same capture zone as before while extracting less water and preventing potential cross contamination from other sources.

*During the last quarter,* approximately 2 million gallons of groundwater were extracted and about 1 pound of TCE has been removed. Groundwater sampling and water level measurements were reduced in several select wells to optimize monitoring costs. These wells have consistently shown non-detect levels and/or there is enough historical

## Task E2 - Site Oversight (cont.)

data to warrant the reduction in frequency. CTS submitted a five-year effectiveness evaluation on 1/16/96.

Board staff continued to investigate potential off-site sources of groundwater pollution that may have commingled with the CTS plume. One PRP submitted an initial report on May 26, 1995 and an additional investigation report on November 30, 1995. Board staff met with the PRP to discuss the results of the investigation. The PRP will perform one year of monitoring to determine groundwater trends. At the end of the monitoring period, Board staff will review the results and determine appropriate measures.

*During the next six months*, CTS will continue groundwater monitoring and extraction. Board staff have reviewed the five-year report and will present a status report to the Board in April.

### FAIRCHILD, SAN JOSE

The final Remedial Action Plan (RAP) was adopted by the Regional Board in January 1989 and amended in May 1990. It includes continued groundwater extraction (on and off-site) and SVE for dewatered zones within the on-site slurry wall. The RAP sets cleanup standards for on-site groundwaters at MCLs and for off-site groundwaters at less than one fourth the MCLs.

Board staff approved a temporary shut-down of the off-site extraction wells in 1991 and renewed its approval in 1994. Computer modeling shows that groundwater pumping is ineffective in speeding up remediation of the aquifers at this site; the model predicts that off-site cleanup will take 15 years, whether or not off-site pumping occurs.

*During the last quarter*, Fairchild operated the on-site extraction system at an average rate of 95 gpm, discharging the treated groundwater to the new B-zone reinjection well located just outside the slurry wall. Total discharge volume for the quarter was about 12.5 million gallons. The off-site extraction wells were shut down as part of the approved demonstration project. The no-pumping program will continue through at least 1998, provided the off-site plume remains stable. Board staff inspected the facility on 3/27/96 and found it in compliance with Board orders.

*During the next six months*, Fairchild will continue on-site groundwater extraction, with reinjection of treated groundwater. Fairchild may request modifications to its cleanup order, in order to establish a non-attainment zone and/or to revise the off-site cleanup standard. Any such request would need to be approved by the Board and EPA.

### HEWLETT-PACKARD, 640 PAGE MILL ROAD, PALO ALTO

*Background:* The Regional Board adopted final site cleanup requirements for the California, Olive, and Emerson Streets (COE) area, which includes the 640 and 395 Page Mill Road (PMR) and 601 California Avenue sites, in September 1994. The Record of Decision (ROD) was adopted by U.S. EPA on April 13, 1995. The approved cleanup plan includes soil vapor extraction, groundwater extraction, and associated treatment.

*Last quarter:* HP and Varian continue to operate their groundwater and soil vapor extraction and treatment systems. They extracted and treated about 3.5 million gallons of groundwater, with 1.7 mg treated at HP 640 and 1.8 mg treated at Varian 601. A small portion of the total was used for toilet flushing at an office building at 650 PMR and for irrigation at Varian 601. One off-site extraction well was out of service last quarter due to construction of a new groundwater treatment system at Varian 611 Hansen Way site. The Varian 601 GWET system was temporarily shut down at the end of February, due to building demolition at the site.

HP evaluated closure of the SVE system at the 640 PMR site. Three rounds of vapor sampling were performed before the system restarted on March 20, 1996. The Varian 601 SVE system extracted soil vapor from six Area D wells. The HP 395 SVE system extracted soil vapor from Areas IV and V.

HP installed one A1 zone and four vadose/A1U zone groundwater and seven soil vapor extraction wells at 395 PMR (Area X) last quarter. It also decommissioned and replaced one existing groundwater extraction (EW-11X) in Area X because the well was screened across two water-bearing zones. HP and Varian also installed three off-site monitoring wells at the WSJ property. Installation and start-up of the expanded system has not been completed due to delays in acquiring access and permitting issues from the city of Palo Alto. On March 6, Board staff approved HP and Varian's request to delay start-up of the expanded groundwater extraction system at the COE area.

*Next two quarters:* HP and Varian will continue operating the SVE and groundwater extraction and treatment system at the COE area. HP plans to reuse about 25% of its treated groundwater for on-site landscaping irrigation. HP and Varian will conduct additional field work associated with the installation and start-up of the expanded GWET once all the access and permitting issues are resolved. They plan to submit two separate reports at two specified dates: one report due on June 15 documenting start-up of extraction wells EW-15 and EW-16, and one report due on

## Task E2 - Site Oversight (cont.)

October 15 documenting start-up of extraction wells EW-12 and EW-14.

Redevelopment activities at the Varian 601 site will continue during the next quarter. The GWET system will be temporarily shut down through June. The Area D SVE system at the Varian site will remain shut down pending post-demolition soil sampling results and evaluation of soil remediation alternatives. HP will document start-up of the groundwater and soil vapor remediation systems at the 395 PMR site, Area X, by August 15, 1996.

### **HEWLETT-PACKARD, 1501 PAGE MILL ROAD, PALO ALTO**

*Background:* The Regional Board adopted final site cleanup requirements in August 1994. The approved cleanup plan requires Hewlett-Packard (HP) to expand its soil vapor extraction and groundwater extraction system at this site.

*Last quarter:* HP continued to operate its SVE and groundwater extraction and treatment system (GWET). The expanded SVE system has a total of 22 wells, and the extracted vapors are treated via adsorption onto granular activated carbon. HP extracted and treated about 1.6 million gallons of groundwater.

Board staff approved HP's start-up plan for the GWET system last quarter. The expanded GWET consists 28 extraction wells and two 10,000 pounds carbon adsorption units. In order to evaluate the zone of influence and to identify if there is any interconnection between different water-bearing zones, HP plans a phased start-up of the expanded GWET system. Phase I consists of six extraction wells and began full-time operation in December 1995. Phase II consists of one extraction well and has been in full operation since February 1996. Phase III consists of eight extraction wells and commenced extraction in March 1996.

*Next two quarters:* HP will continue operating the SVE and groundwater extraction and treatment systems. HP will start the fourth and final phase of GWET expansion this summer. HP will continue taking groundwater level measurements in the next four consecutive months to monitor drawdown from the expanded GWET system. Prior to the second quarter monitoring event, HP plans to install "dedicated sampling pumps" in its monitoring wells. This new monitoring technique is more efficient and cost effective.

### **HEXCEL CORPORATION, LIVERMORE, ALAMEDA COUNTY**

*No longer part of MSCA -- now a state lead*

### **INTEL, SANTA CLARA III, Santa Clara**

The Final RAP for the site was adopted by the Board in July 1990. The cleanup plan for this site consists of groundwater extraction and treatment by carbon adsorption. From April 1991 through July 1993, Intel tried a variety of cyclic pumping trials to see if the efficiency of groundwater remediation at the site could be improved. Cyclic pumping (also known as pulsed pumping) is believed to be a method for improving groundwater remediation efficiencies.

Intel has submitted effectiveness reports on these trials that conclude that these pumping cycles are no more efficient than continuous pumping. After meeting with Intel to discuss the latest cyclic pumping results, Board staff approved Intel's request for a twelve month trial period with all pumps off. During this trial, monitoring wells were sampled quarterly to determine if there were any plume migration or concentration changes. The monitoring results of this twelve month off trial indicate no significant migration or changes in plume concentrations. Board staff have allowed Intel to leave the pumps off as an ongoing test of the stability of the pollutant plume. Intel has submitted a petition requesting that the Board change the point of compliance with the site's groundwater cleanup standards from all areas of the site, to the property boundary of the site. Intel claims that groundwater cleanup standards are not likely to be met onsite using available technology and that groundwater extraction is no longer providing significant reduction of groundwater contamination. Intel believes that remaining contamination will not migrate from the site and that the site can be managed such that there is minimal risk from the remaining contaminants in the groundwater.

Board Staff has prepared draft revised Site Cleanup Requirements (SCRs) incorporating a Non-Attainment Area concept wherein concentrations of VOCs in groundwater may exceed cleanup standards without active remediation being required. Board Staff has sent the draft SCRs to U.S. EPA for their review and comments. Intel has also requested that this site be delisted from the NPL.

*Activities this quarter:* The groundwater extraction system was not operating due to the ongoing trial period during which the extraction system has been shut down. The extraction system remains shut down.

*Projected events for the next two quarters:* Board Staff will await EPA's review of the revised Site Cleanup Requirements for Intel Santa Clara III and EPA's decision on including the establishment of a non-attainment area. The revised Requirements (Tentative Order) will be considered by the Board if EPA concurs.

## Task E2 - Site Oversight (cont.)

### INTERNATIONAL BUSINESS MACHINES, SAN JOSE

The final Remedial Action Plan (RAP) was adopted by the Regional Board in October 1988. It set cleanup standards similar to those for Fairchild (San Jose) and included SVE (on-site) and continued groundwater extraction (on and off-site).

*During the last quarter*, IBM extracted and treated about 135 million gallons of groundwater, reusing about 101 million gallons (or 75%) of this total volume. All on-site extracted groundwater was reused, by reinjection, landscape irrigation, or as feed water for industrial use. All off-site groundwater was discharged to Canoas Creek. The soil vapor extraction system removed about 90 pounds of VOCs from on-site soils during the quarter. The off-site groundwater plume remained stable.

IBM submitted a technical report on 1,1-DCE analysis in 2/96; the report concluded that IBM had over-estimated DCE concentrations in 1994-95 due to a change in analytical instrumentation. IBM reduced its off-site extraction rate to 150 gpm on 3/15/96; the Board had previously approved this reduced level but IBM had temporarily increased the extraction rate while it assessed the DCE situation. Board staff inspected the facility on 3/27/96 and found it in compliance with Board orders.

*During the next six months*, IBM will continue its cleanup program.

### MICRO STORAGE/INTEL MAGNETICS, SANTA CLARA

The Final Remedial Action Plan (RAP) for the site was adopted by the Board in July 1991. The Record of Decision (ROD) was signed in August 1991. The cleanup plan for this site includes groundwater extraction and treatment by carbon adsorption. The discharger has requested that they be allowed to leave the extraction system off to see what effect this has on the plume and to provide information that may be useful in determining if non-attainment area status is appropriate for this site. Board Staff approved the discharger's request and are allowing the extraction system to remain shut down. The extraction system was shut down at the beginning of the second quarter 1995.

*Activities this quarter:* Due to the shut down of the extraction system, no groundwater was discharged during the first quarter.

*Projected Events for the next two quarters:* The discharger has requested that they be considered for inclusion under the Board's Non Attainment Policy, whereby the point of compliance for the groundwater cleanup standards be altered to allow an area where groundwater VOC levels exceed the cleanup standards specified for the site. Board Staff will evaluate the request.

### NATIONAL SEMICONDUCTOR CORPORATION & ADVANCED MICRO DEVICES (1165 ARQUES, FORMERLY MONOLITHIC MEMORIES), SUNNYVALE / SANTA CLARA

These two dischargers are located within an area in eastern Sunnyvale/western Santa Clara, designated as Operable Unit 1. OU1 has been subdivided into 3 subunits. NSC is responsible for remediating subunit 1, AMD is responsible for remediating subunit 2, and both NSC and AMD are responsible for remediating subunit 3 (the co-mingled area downgradient of both NSC and AMD). NSC is continuing to implement the cleanup plan specified in the ROD adopted in September 1991. Soil is being remediated utilizing soil vapor extraction. Groundwater is being remediated via groundwater extraction and treatment.

*National Semiconductor Corporation (NSC)* is continuing to implement the cleanup plan. During the last quarter, 33 groundwater extraction wells were in operation within subunit 1, and 3 groundwater extraction wells and a large dewatering system were in operation in subunit 3. A number of others extraction wells were out of service because of low water levels. The total volume of groundwater extracted from subunits 1 and 3 (excluding the dewatering system) was 29 million gallons, averaging 264 gpm. The total VOC mass removed was 110 pounds. Three groundwater treatment systems are utilized to treat extracted groundwater, which is discharged under NPDES permit. A portion of the treated water is utilized to fill a man-made lake on the company grounds. Groundwater monitoring indicates that contaminant concentrations within the A and B1 aquifer have generally declined.

In the last quarter, NSC submitted a report summarizing the results of remedial investigation of the area along the western boundary of Operable Unit 1. The additional work is necessary in order to better determine the degree of commingling of OU1 and OU2 plumes. NSC's investigation was coordinated with investigations conducted by OU2 dischargers. NSC also completed installation of SVE systems at all source areas.

During the next two quarters Regional Board staff will review the remedial investigation report and meet with NSC to discuss the report. Staff will also provide the Regional Board with an update of the status of OU1/OU2

plume investigation. NSC will continue to operate on and off-site groundwater extraction systems.

*Advanced Micro Devices (AMD)* is continuing to implement the cleanup plan. During the last quarter, 12 groundwater extraction wells were in operation within subunit 2. The total volume of groundwater extracted from subunit was 5.7 million gallons, averaging 44 gpm. The total VOC mass removed was 15.6 pounds. An air stripper is utilized to treat extracted groundwater, which is discharged under NPDES permit. Groundwater monitoring indicates that contaminant concentrations within the A aquifer has generally declined; however, B aquifer concentrations appear to be stable. SVE extraction at one source area has continued to operate, removing a total of 6.6 pounds during the quarter. Subunit 3 activities are described in the MSCA update for NSC.

During the next two quarters, AMD will continue to operate the soil and groundwater remediation systems.

#### **RHONE-POULENC/SANDOZ, EAST PALO ALTO**

*Background:* In order to expedite investigation and cleanup, the Site was divided into Upland and Wetland Operable Units (OUs) in 1991. The RAP/ROD for the Upland OU was approved February 1992. The remedial action plan consisted of: removal of highest concentration soil (>5,000 mg/kg arsenic); treatment of soil containing between 500-5,000 mg/kg arsenic; capping of all soil with concentration of arsenic >70 mg/kg; deed restrictions of any property containing >70 mg/kg arsenic; slurry wall to contain groundwater; and, a groundwater contingency plan to prevent further migration of pollutants. In order to expedite remediation further, the Ecological Assessment was divided into Non-tidal and Tidal Wetland Reports. Based on the Ecological Assessment report for the Non-tidal Wetland, the Upland OU RAP/ROD boundaries were amended using an Explanation of Significant Difference which was adopted in March 1994 to annex the Non-tidal Wetland portion of the Wetland OU into the Upland OU. The remedy adopted for the Upland OU was then applied to the Non-tidal Wetland area. A RAP/ROD for the Tidal Wetland Operable Unit has not been completed.

*Activities this quarter:* During the last quarter Board staff continued to discuss with Rhone-Poulenc and an adjacent property owner capping requirements for their property. Staff also attempted to facilitate negotiations between the parties in order to develop a capping scenario which is both protective and will have the least impact on future land use. Staff are encouraging the parties to use a formal dispute resolution process to come to a final agreement.

Earlier this year, Rhone-Poulenc conducted soil sampling on a vacant lot located to the south of the Site where a residential subdivision has been proposed in order to

confirm that elevated concentrations of arsenic were not present. Sampling has indicated that arsenic is present in soil above the residential cleanup standard adopted in the Upland OU Record of Decision. Additional characterization has been performed to determine the extent of the pollution and to develop alternatives for remediation.

*Activities anticipated the next two quarters:* During the next two quarters Board staff shall continue to try and facilitate negotiations over the capping of the adjacent property. Also, a remedial action plan should be prepared and implemented for the property located to the south of the site.

The Ecological Risk Assessment Workplan for the Tidal Wetland OU shall be submitted to the agencies for review. Upon review a meeting between the agencies and Rhone Poulenc will occur to discuss comments. Upon acceptance by the agencies of the Ecological Risk Assessment Workplan a feasibility study and remedial action plan for the Wetland Operable Unit will be prepared and submitted to the agencies.

#### **SIEMENS COMPONENTS INC., 19000 HOMESTEAD ROAD; INTERSIL INC., 10900 N. TANTAU ROAD, CUPERTINO**

*Background:* The Regional Board adopted final Site Cleanup Requirements (SCR) for this Superfund site in August 1990, and EPA issued a concurring ROD. The final SCR required additional groundwater extraction wells and soil vapor extraction wells. All work needed to implement the final SCR has been completed. Intersil has 7 groundwater extraction wells. Its SVE system was successfully operated and has been removed. Siemens had 16 soil vapor wells and 18 groundwater extraction wells. The two companies jointly operate 3 off-site extraction wells. An adjacent site formerly occupied by AMI is also a source of VOCs and has an interim groundwater remediation system in operation.

*Last quarter:* Siemens/Intersil continued implementing the approved cleanup plan, extracting and treating 15.1 million gallons of groundwater and removing 42 pounds of VOCs (on-site only). The AMI system extracted and treated 12 million gallons of groundwater and removed 9.5 lbs of VOCs. AMI completed the additional source investigation proposed in the December Workplan and did not find any additional sources in soil. AMI is implementing the additional groundwater investigation proposed in their March 1, 1996 workplan. Siemens has modified the SVE system to operate with fewer wells, and has started the reuse of treated groundwater onsite.

*Next two quarters:* Siemens/Intersil will continue remediation activities. Siemens is planning to propose a modified groundwater extraction system.

**SOLVENT SERVICE INC. (SSI),  
1021 BERRYESSA ROAD, SAN JOSE**

The Final Remedial Action Plan (RAP) for the site was adopted by the Board in August 1990. A ROD for this site was adopted September 27, 1990. The site was removed from the NPL circa August, 1990 and is now a RCRA site. The Cleanup Plan includes groundwater extraction / treatment and soil vapor extraction/treatment, and capping of the entire site. Steam injection vacuum extraction (SIVE) has been discontinued because engineering evaluation showed that soil vapor extraction (SVE) was just as effective as SIVE and was less costly. Groundwater and vapor are treated by bio-treatment, carbon filtering and air stripping.

*Activities this quarter:* On-site remediation by groundwater extraction and SVE is continuing. SSI has submitted the Quarterly Report for the January - March 1996 period. This report shows that about 1,062 pounds of VOCs were removed by SVE during the quarter, while only about 0.2 pounds were removed by the four groundwater extraction wells. About 143,712 gallons of groundwater were extracted, by all wells (including SVE dual extraction wells), during this quarter, and about 41% (by estimate) was used in on-site cooling tower(s) prior to discharge to the sanitary sewer. The remaining extracted groundwater had high concentrations of pollutants and was shipped off-site for treatment and/or disposal. Board Staff has completed a review of the SSI 5-year status report and prepared a report for comment.

In November SSI implemented an earlier proposal for an off-site soil gas survey in the vicinity of Building 1040 (downgradient of the SSI site); vinyl chloride was not reported present above the reporting level (from 2 to 4 ppb) in any vapor sample. SSI obtained site access and installed and tested five dual phase vapor and groundwater recovery wells in December, for off-site groundwater remediation. During this reporting period SSI has installed all the well controls and piping, and is now planning to test the complete off-site extraction system.

*Projected events for next two quarters:* It is anticipated that periodic Self-Monitoring Reports will be submitted as required. It is also anticipated that testing of the off-site remediation system will be completed and remediation will commence.

**SYNERTEK #1, SANTA CLARA**

The Final RAP for the site was adopted by the Board in March 1991. The cleanup plan includes groundwater extraction and treatment by air stripping.

*Activities this quarter:* During the first quarter 1,479,991 gallons of groundwater were extracted and 1.24 pounds of VOCs were removed. There were no NPDES violations.

*Projected events for next two quarters:* Routine review of self monitoring reports. Review of Synertek's Five Year Status Report.

**TELEDYNE SEMICONDUCTOR,  
1300 TERRA BELLA AVE.,  
SPECTRA-PHYSICS INC.,  
1250 WEST MIDDLEFIELD ROAD,  
MOUNTAIN VIEW**

*Background:* The Regional Board adopted final Site Cleanup Requirements for these two adjacent Superfund sites in February of 1991, and EPA issued a Record of Decision. The approved cleanup plan requires SVE at the Spectra-Physics facility and groundwater extraction off-site and at the Teledyne facility.

The off-site area includes the North Bayshore area, which contains several additional sources of VOC contamination. The Board has issued initial Site Cleanup Requirements for the former Montwood site and for 1098 Alta Avenue. Montwood's onsite groundwater remediation system started operation in October 1994 and is hooked up to the North Bayshore Extraction System, installed and operated by Teledyne/Spectra-Physics. 1098 Alta has installed an onsite SVE and groundwater extraction and treatment system.

*Last quarter:* Teledyne and Spectra-Physics continued implementing the approved cleanup plan, extracting and treating 32.0 million gallons of groundwater and removing 125 pounds of VOCs (on-site and off-site). Treated groundwater was discharged to the storm drain (on-site) and to the sanitary sewer (off-site).

Off-site work included investigation/remediation activities at Montwood, Santa Clara County Transportation Agency, and 1098 Alta Avenue. Although Teledyne and Spectra-Physics completed an access agreement with the City of Mountain View and Silicon Graphics to allow re-installation of monitoring wells in the Farmer's Field area, these wells have not been replaced yet due to construction activities in Farmer's Field. These wells as well as Alta's offsite wells are scheduled for installment as soon as grading at Farmer's Field is completed. Montwood submitted an evaluation of its interim groundwater remediation system in mid-February 1996. Teledyne &

Spectra-Physics submitted the 5-year status report in mid-March 1996.

*Next two quarters:* Teledyne and Spectra-Physics will continue to implement the approved cleanup plan, and North Bayshore dischargers will continue investigation and interim remedial actions. Board staff will continue investigating the North Bayshore area to determine the extent of other sites contribution to groundwater contamination in the area, and will work towards bringing these dischargers under a Regional Board order. Board staff will respond to Montwood's evaluation in May 1996. The Board will consider amending the site cleanup requirements for 1098 Alta to add additional dischargers to the order in June 1996. The Board will hear a status report on Teledyne's 5 year report in July 1996.

**VAN WATERS & ROGERS, INC,  
2256 JUNCTION AVENUE, SAN JOSE**

The final RAP was approved on September 18, 1991 under Site Cleanup Order No. 91-138. The cleanup plan consists of: soil vapor extraction (SVE) of accessible hot spots, extraction and treatment of groundwater in the A and B aquifers until cleanup standards are met, and long term monitoring.

*During the last quarter,* VW&R extracted and treated about 2 million gallons of groundwater, including an average of 19,000 gallons per day from the A-aquifer and 2,500 gallons per day from the B-aquifer. Chemical concentrations remained similar to the previous quarters. VW&R's discharge is regulated under our NPDES general permit for discharges from cleanup efforts involving VOCs in groundwater.

Soil vapors are extracted from two "hot" locations at the facility: the railroad spur area and the loading dock area. Three horizontal wells drilled beneath the underground storage tank farm are also part of the extraction system. The SVE system operated for approximately 1,260 hours during the quarter.

VW&R submitted an alternative monitoring program for its underground storage tanks (USTs) that is more stringent than that required by regulation but better suited to its UST operation. UST regulations state that the Board must adopt a resolution to allow the variance.

*During the next six months,* SVE and groundwater extraction will continue. Board staff have prepared a resolution supporting an alternative monitoring program for its USTs and will present it to the Board for their approval in April.

**US EPA and CAL/EPA -- DTSC LEAD SITES:**  
*(RWQCB is the support agency)*

**JASCO, MOUNTAIN VIEW**

EPA issued the ROD in September 1992. The cleanup plan calls for expanded groundwater extraction, treatment prior to POTW discharger, a deed restriction prohibiting wells in shallow groundwater, and ex-situ bioremediation of soils. EPA issued an administrative order for Remedial Design/Remedial Action in December 1992. EPA has approved Jasco's request to pilot-test an alternative approach: air sparging and soil vapor extraction. Operations have ceased at Jasco, and the site will be converted to residential use in the future.

*During the last quarter,* Jasco continued pilot-testing its dual-extraction system.

*During the next six months,* Jasco will complete pilot-testing of air sparging and soil vapor extraction. EPA will review Jasco's pre-final design in 5/96 and expects to complete remediation by April 1997.

**LIQUID GOLD, 580 FWY NEAR HOFFMAN MARSH,  
RICHMOND, CONTRA COSTA COUNTY**

*Current Status:* During a February 2, 1995, inspection, RWQCB and DTSC noted some deficiencies in construction aspects of the Remedial Action. On July 28, 1995, DTSC, RWQCB, the US EPA, the National Oceanic and Atmospheric Administration, and the Department of Fish and Game performed a follow up inspection to the February inspection. The deficiencies were corrected and the agencies concluded that all of the construction aspects of the Remedial Action Plan have been implemented according to the specifications. The remedial action consisted of excavating sediment from the drainage channels, placing the excavated sediment on the former activity area of the site, and covering this area with two feet of clean soil. In a letter dated August 14, 1995, DTSC approved completion of the final remedial action.

Southern Pacific Lines currently maintains this cover and conducts monitoring activities as required by the Operation and Maintenance Plan prepared for this facility.

*Projected Activities:* Over the next six months, the effectiveness of these corrective actions will be evaluated through monitoring activities conducted at the site.

#### **LORENTZ BARREL AND DRUM, SAN JOSE**

*Activities During Last Quarter:* During the last quarter extraction and treatment of shallow groundwater continued at the site. Compliance with discharge limits set forth in the NPDES permit were maintained.

*Activities Anticipated During the Next Two Quarters:* During the next two quarters, groundwater extraction and treatment will continue. No activities other than routine maintenance are anticipated.

#### **MIDDLEFIELD-ELLIS-WHISMAN SITES, MOUNTAIN VIEW**

EPA adopted a cleanup plan for the MEW area in June 1989. It requires soil cleanup by excavation or SVE and groundwater cleanup by extraction and treatment. In mid-1991, EPA and two of the companies - Intel and Raytheon - signed a consent decree covering implementation of final cleanup activities; it received court approval in April 1992. EPA issued a unilateral enforcement order to Fairchild and other MEW dischargers in November 1990.

Responsible parties at the site have submitted RD/RA reports in response to the unilateral order and the consent decree. The companies have proposed additional source controls as well as a regional remediation system (south and north of Highway 101). The portion north of Highway 101 is closely linked to cleanup activities at Moffett Field Naval Air Station.

*During the last quarter,* remediation continued at several MEW on-site areas. Fairchild, Raytheon, and Intel collectively extracted and treated 34.5 million gallons of contaminated groundwater, discharging 33.9 million gallons to surface waters and reusing 0.6 million gallons for industrial supply. Implementation of source control plans continued, including soil excavation, SVE, and groundwater extraction. The companies began extracting groundwater from four deep wells (Silva well area). The companies resubmitted a final design for the regional system (south of Highway 101). EPA commented on the final design for the regional system (north of Highway 101).

*During the next six months,* the companies will continue groundwater remediation and implementation of source controls. EPA expects to comment on the resubmitted design (south of Highway 101) in June. The companies will resubmit the final design (north of Highway 101) in August. Reuse of effluent from the regional system will be

considered once the final designs are approved; NASA Ames is a big potential user of treated groundwater.

#### **MOFFETT FIELD NAVAL AIR STATION, MOUNTAIN VIEW / SUNNYVALE (DOD FACILITY)**

*Not part of South Bay MSCA.*

As of March 1, 1992, oversight responsibility for this site was transferred to another Regional Board division, which will be reporting through the Department of Defense federal facilities agreement (FFA). In mid-1993, the Navy and NASA established an agreement over responsibility for cleanup following the transfer of Moffett Field to NASA jurisdiction.

#### **UNITED HECKATHORN (aka: LEVIN METALS), 402 WRIGHT AVENUE, RICHMOND, CONTRA COSTA COUNTY**

The United Heckathorn Superfund Site is the former location of a DDT reformulation and packaging facility. Large quantities of DDT were released during site operations and remain present in bay sediments. The approved remedial action plan specifies dredging of affected sediments in the Lauritzen Channel and Parr Canal.

The final draft workplan for dredging of affected sediments was reviewed this quarter. A settlement regarding responsibility for cleanup costs has not yet been achieved. Negotiations have been ongoing during the current quarter. Should negotiations be concluded, dredging activities will commence in the summer of 1996.

In the event that dredging operations commence during the summer of 1996, a final workplan and dredging plan will be reviewed during the next quarter.

#### **WESTINGHOUSE, SUNNYVALE**

The Record of Decision for this EPA lead site was signed on October 16, 1991. EPA reached agreement with Westinghouse to start remedial design in February 1992.

EPA and Westinghouse have failed to reach agreement for a Consent Decree for final remedial action. Instead, EPA issued an administrative order in September 1993 that compels Westinghouse to perform the full-scale cleanup plan as designed. The remedial design package was finalized and submitted to EPA during March 1994. Shakedown of the pilot groundwater treatment and extraction system started December 1992. Full scale operation of the extraction system began during the second quarter 1995.

*Activities this quarter:* During the first quarter 1996 approximately 4,909,682 gallons of groundwater was extracted. Approximately 4.36 pounds of PCBs were removed during the first quarter, bringing the total removed since startup to approximately 33.18 pounds. System discharge is to the City of Sunnyvale's sanitary sewer.

*Projected events for the next two quarters:* The discharger will prepare and submit for EPA's approval, the Soils Completion Report.

**STATUS OF REGIONAL BOARD MSCA SUPPORT CONTRACTS**

**DATA VALIDATION  
(INTERAGENCY AGREEMENT W/CSDHS)**

**BASELINE PUBLIC HEALTH EVALUATION  
CONTRACT (W/ICF CLEMENT)**

**TECHNICAL ASSISTANCE CONTRACT**

**SUPERFUND LABORATORY CONTRACT**

All four of the above contracts have expired and will not be renewed or renegotiated. Where services are needed that were formerly provided by contract, they will be provided through other informal, ad-hoc means.